



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

1200 Sixth Avenue, Suite 900  
Seattle, WA 98101-3140

OFFICE OF  
ECOSYSTEMS, TRIBAL AND  
PUBLIC AFFAIRS

November 19, 2012

Ms. Liana Liu, Area Engineer  
Federal Highway Administration  
Washington Division  
711 South Capitol Way, Suite 501  
Olympia, Washington 98501

Mr. Jason Smith, Environmental Manager  
Washington State Department of Transportation  
South Central Region  
P.O. Box 12560  
Yakima, Washington 98909

Re: Interstate 90 Snoqualmie Pass East Avalanche Structures Draft Supplemental  
Environmental Impact Statement (EPA Region 10 Project Number: 99-099-FHW).

Dear Ms. Liu and Mr. Smith:

The U.S. Environmental Protection Agency has reviewed the I-90 Snoqualmie Pass East Avalanche Structures Draft Supplemental Environmental Impact Statement. We are submitting comments in accordance with our responsibilities under the National Environmental Policy Act and Section 309 of the Clean Air Act. We appreciate this opportunity to review the proposed change in project design.

WSDOT is evaluating a design modification to construct avalanche bridges in place of an expanded snowshed that was originally part of the I-90 project Selected Alternative. With the Selected Snowshed design, avalanches and landslides would travel over the structure to avoid impacts to the travelling public; with the Proposed Bridges design, avalanches and landslides would travel beneath the bridge structures. Because both designs meet project needs, the Proposed Bridges design modification is being considered due to its projected long-term operations and maintenance cost savings for the State, which would be derived from the elimination of the electrical, mechanical, and fire suppressions systems that would be required for the Selected Snowshed design.

We appreciate the clarity and presentation of the Draft SEIS and, based on the information provided, agree that the differences in environmental effects from the two alternatives would be small. We are rating the Draft SEIS as LO, Lack of Objections. An explanation of this rating is enclosed. While we would not expect the general conclusions to change, we do recommend that the Final SEIS include the following additional information and updates to refine the analysis for the public and decision maker:

- The threshold at which an extreme avalanche could affect each structure or impact traffic, and how often avalanche control and snow removal may be needed.
- An indication of whether or not, and to what extent, the effects of climate change and the need for adaptation to those effects has been factored into the analysis and proposed designs. For

example, explain whether the 100-year avalanche event predictions incorporate potential increase in rain-on-snow events, and how the potential for more frequent 100-year avalanche events may affect design integrity, maintenance, operations, and cost.

- An update of cost estimates for operations and maintenance that includes:
  - The additional staffing needed to address the aging Proposed Bridges after 20 years of use;
  - The frequency and costs of clearing the avalanche chutes for the Proposed Bridges; and
  - Adjustments to cost projections and comparisons that result from inclusion of all of the above requested information.
- A brief summary of the USFWS Biological Opinion regarding effects to ESA listed species, including bull trout and northern spotted owl (with the Biological Opinion included as an Appendix).
- Any potential additional mitigation due to the increased loss of mature forest that would result from the Proposed Bridges.

Thank you for the opportunity to offer comment on the I-90 Snoqualmie Pass East Supplemental EIS for Avalanche Structures. If you have questions or would like to discuss these comments, please contact me at (206) 553-1601 or via electronic mail at [reichgott.christine@epa.gov](mailto:reichgott.christine@epa.gov), or contact Elaine Somers of my staff at (206) 553-2966 or via electronic mail at [somers.elaine@epa.gov](mailto:somers.elaine@epa.gov).

Sincerely,



Christine B. Reichgott, Manager  
Environmental Review and Sediment Management Unit

Enclosure

**U.S. Environmental Protection Agency Rating System for  
Draft Environmental Impact Statements  
Definitions and Follow-Up Action\***

**Environmental Impact of the Action**

**LO – Lack of Objections**

The U.S. Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

**EC – Environmental Concerns**

EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

**EO – Environmental Objections**

EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

**EU – Environmentally Unsatisfactory**

EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

**Adequacy of the Impact Statement**

**Category 1 – Adequate**

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

**Category 2 – Insufficient Information**

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

**Category 3 – Inadequate**

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

\* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.